

FORM PTO-1449 (Rev. 2-32) U. S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE Information Disclosure Statement by Applicant (Use several sheets if necessary)	ATTY. DOCKET NO. 6-159-USA-CIP 1	SERIAL NO Not yet assigned
	APPLICANT Pfeffer et al.	
	FILING DATE Herewith	GROUP Unknown

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U.S. PATENT DOCUMENTS

Exmr Initial	Document Number	Date	Name	Class	Sub Class	Filing Date
<i>am</i>	4,182,655	1/1980	Hartmeier	435	181	
<i>am</i>	4,975,375	12/1990	Haruta et al.	435	182	

FOREIGN PATENT DOCUMENTS

Exmr Initial	Document Number	Date	Country	Class	Sub Class	Translation YES NO

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

1)	<i>am</i>	Pantiliano et al., "Large Increases in General Stability for Subtilisin BPN' Through Incremental Changes in The Free Energy of Unfolding," Biochemistry Vol. 28, pages 7205-7213 (1989)
2)		Guide to Protein Purification, "Methods in Enzymology," Vol. 182, pages 77-78, The Academic Press Inc.
3)		Moon et al., "Characterization of k-Carrageenan Gels Used for Immobilization of Bacillus Firmus," Biotechnol. Prog., Vol. 7 (6), pages 518-525 (1991)
4)		Chen et al., "Enzyme Engineering for Nonaqueous Solvents. II. Additive Effects of Mutations on the Stability and Activity of Subtilisin E in Polar Organic Media," Biotechnol Prog., Vol 7, ps. 125-129 (1991)
5)		Enzyme Catalysis in Organic Synthesis, a Comprehensive Handbook, pages 74-87
6)		Volkin et al., "Enzyme Thermoinactivation in Anhydrous Organic Solvents," Biotech. And Bioeng., Vol. 37, pages 843-853 (1991)
7)		Arnaud et al., "Diffusion of Lactose in k-Carrageenan/Locust Bean Gum Gel Beads With or Without Entrapped Growing Lactic Acid Bacteria," Biotech. And Bioeng., Vol 38, pages 1041-1049 (1991)
8)		Chatterjee et al., "Determination of Equilibrium and Individual Rate Constants for Subtilisin-Catalyzed Transesterification in Anhydrous Environments," Biotech. and Bioeng., Vol. 40, pages 1069-1077 (1992)
9)		Xu et al., "Engineering Subtilisin for Use in Organic Solvents," Vol. 672, pages 94-99 (1992)
10)		Adams et al., "Kinetic Isotope Effect Investigation of Enzyme Mechanism in Organic Solvents," Vol. 112, pages 9418-9419 (1990)
11)		Klibanov et al., "Enzymatic Catalysis in Anhydrous Organic Solvents," TIBS 14, pages 141-144, (1989)
12)	<i>am</i>	Klibanov et al., "Asymmetric Transformations Catalyzed by Enzymes in Organic Solvents," Acc. Chem. Res., Vol. 23, pages 114-120 (1990)

Examiner <i>am</i> <i>clh</i>	Date Considered <i>6/30/02</i>
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

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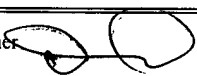
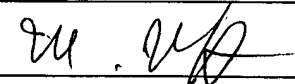
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OTHER DOCUMENTS

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13)		Oakenfull et al. , "A Kinetic Investigation of the Extent of Polymer Aggregation in Carageenan and Gels," Chemistry and Industry, pages 201-202 (1987)
14)		Cambou et al., "Preparative Production of Optically Active Esters and Alcohols Using Esterase-Catalyzed Stereospecific Transesterification in Organic Media," J. Am. Chem. Soc. 106, pages 2687-2692 (1984)
15)		Kazandjian et al., "Regioselective Oxidation of Phenols Catalyzed by Polyphenol Oxidase in Chloroform," J. Am. Chem. Soc. 107, pages 5448-5450 (1985)
16)		Langrand et al., "Lipase-Catalyzed Ester Formation in Organic Solvents an Easy Preparative Resolution Of α -Substituted Cyclohexanols," Tetrahedron Letters, Vol. 26, No. 15, pages 1857-1860 (1985)

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